



Patent  
Attorney's Docket No. 02-4018

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of )  
Daben Liu et al. ) Group Art Unit: Unassigned  
Application No.: 10/685,585 ) Examiner: Unassigned  
Filed: October 16, 2003 )  
Title: SYSTEMS AND METHODS FOR )  
CLASSIFYING AUDIO INTO )  
BROAD PHONEME CLASSES )

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

M.S. Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicant(s) bring to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed before the mailing date of a first Office Action in the above-referenced application. As such, no certification or fee is required. Copies of the listed documents are attached.

Applicant(s) respectfully request(s) that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

Information Disclosure Statement Under 37 C.F.R. § 1.97(b)  
Application Serial No. 10/685,585  
Attorney's Docket No. 02-4018  
Page 2

If any copending application(s) is/are cited on the attached PTO 1449, the Examiner's attention is directed to the foregoing application(s) in compliance with § 2001.06(b) of the Manual of Patent Examining Procedure. By identifying the copending application(s), the assignee and/or applicant of the application(s) do not waive confidentiality of the application(s). Accordingly, the U.S. Patent and Trademark Office is requested to maintain the confidentiality of the copending application(s) under 35 U.S.C. § 122.

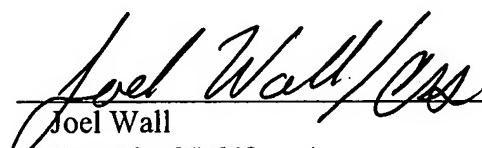
This submission does not represent that a search has been made and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and Applicant(s) determine(s) that the cited document(s) do not constitute "prior art" under United States law, Applicant(s) reserve(s) the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicant(s) further reserve(s) the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

Information Disclosure Statement Under 37 C.F.R. § 1.97(b)  
Application Serial No. 10/685,585  
Attorney's Docket No. 02-4018  
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If there is any fee due in connection with the filing of this Statement, please charge the  
fee to our Deposit Account No. 07-2347.

Respectfully submitted,

By:   
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Patent  
Attorney's Docket No. 02-4018

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Daben Liu et al. ) Group Art Unit: Unassigned  
Application No.: 10/685,585 ) Examiner: Unassigned  
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CLASSIFYING AUDIO INTO )  
BROAD PHONEME CLASSES )

INFORMATION DISCLOSURE STATEMENT  
TRANSMITTAL LETTER

M.S. Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Sir:

Enclosed is an Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

- No additional fee for submission of the IDS is required.
- The fee of \$180.00 as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- A certification under 37 C.F.R. § 1.97(e) is also enclosed.
- Charge \$ to Deposit Account No. 07-2347 for the fee due.
- A check in the amount of \$ is enclosed for the fee due.

Information Disclosure Statement Transmittal Letter  
Application Serial No. 10/685,585  
Attorney's Docket No. 02-4018  
Page 2

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 07-2347.

Respectfully submitted,

By:

  
\_\_\_\_\_  
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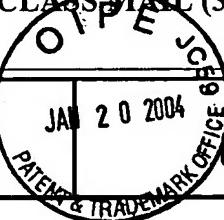
Date: 1-16-2004

**CERTIFICATE OF MAILING BY FIRST CLASS MAIL (37 CFR 1.8)**

Applicant(s):

Docket No.

02-4018

Serial No.  
10/685,585Filing Date  
October 16, 2003Examiner  
UnassignedGroup Art Unit  
Unassigned

Invention:

**SYSTEMS AND METHODS FOR CLASSIFYING AUDIO INTO BROAD PHONEME CLASSES**

I hereby certify that this INFORMATION DISCLOSURE STATEMENTS AND RELATED DOCUMENTS  
*(Identify type of correspondence)*

is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

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**Christian R. Andersen***(Typed or Printed Name of Person Mailing Correspondence)*

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*(Signature of Person Mailing Correspondence)*

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SHEET 1 OF 2

**INFORMATION  
DISCLOSURE  
CITATION**  
PTO-1449

ATTORNEY's DKT NO. 02-4018	APPLICATION NO. 10/685,585
APPLICANT(S) Daben Liu et al.	
FILING DATE October 16, 2003	GROUP Unassigned

**U.S. PATENT DOCUMENTS**

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE

**FOREIGN PATENT DOCUMENTS**

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						Yes	No

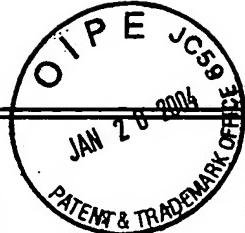
**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	Amit Srivastava et al.: "Sentence Boundary Detection in Arabic Speech," <u>8<sup>th</sup> European Conference on Speech Communication and Technology</u> , September 1-4, 2003 in Geneva, Switzerland; 4 pages.
	Sreenivasa Sista et al.: "Unsupervised Topic Discovery Applied To Segmentation Of News Transcriptions," <u>8<sup>th</sup> European Conference on Speech Communication and Technology</u> , September 1-4, 2003 in Geneva, Switzerland; 4 pages.
	Daben Liu et al.: "Online Speaker Clustering," <u>ICASSP 2003</u> , Vol. I, pages 572-575, 2003 Hong Kong.
	J. Billa et al.: "Audio Indexing Of Arabic Broadcast News," <u>ICASSP 2002</u> ; Orlando, FL; May 13-17, 2002; 4 pages.
	Scott Shepard et al.: "Oasis Translator's Aide," <u>Human Language Technology Conference</u> ; San Diego, California; 2002; 2 pages.
	Scott Shepard et al.: "Newsroom OnTAP - Real-time alerting from streaming audio," December-January 2001 HLT Paper; 2 pages.
	Heidi Christensen et al.: "Punctuation Annotation using Statistical Prosody Models," <u>The Proceedings of Eurospeech</u> , Denmark, 2001; 6 pages.
	Ji-Hwan Kim et al.: "The Use Of Prosody In A Combined System For Punctuation Generation And Speech Recognition," <u>The Proceedings of Eurospeech</u> , Denmark, 2001; 4 pages.
	Jing Huang et al.: "Maximum Entropy Model For Punctuation Annotation From Speech," <u>The Proceedings of Eurospeech</u> , Denmark, 2001; pages 917-920.
	Yoshihiko Gotoh et al.: "Sentence Boundary Detection in Broadcast Speech Transcripts," <u>Proceedings of the International Speech Communication Association Workshop: Automatic Speech Recognition: Challenges for the New Millennium</u> , Paris, September 2000; 8 pages.
	John Makhoul et al.: "Speech and Language Technologies for Audio Indexing and Retrieval," <u>Proceedings of the IEEE</u> , Vol. 88, No. 8, August 2000; pages 1338-1353.
	Francis Kubala et al.: "Integrated Technologies For Indexing Spoken Language," <u>Communications of the ACM</u> , Vol. 43, No. 2, February 2000; pages 48-56.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

**INFORMATION  
DISCLOSURE  
CITATION**  
PTO-1449



ATTORNEY's DKT No. 02-4018	APPLICATION NO. 10/685,585
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FILING DATE October 16, 2003	GROUP Unassigned

**U.S. PATENT DOCUMENTS**

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	Sean Colbath et al.: "Spoken Documents: Creating Searchable Archives from Continuous Audio," <u>Proceedings of the 33<sup>rd</sup> Hawaii International Conference on System Sciences-2000</u> ; pages 1-9.
	Francis Kubala et al.: "Situation Awareness Contexts for Smart Environments," <u>Inter-Agency Workshop on Research Issues for Smart Environments</u> ; Atlanta, GA; 2000; 3 pages.
	Daben Liu et al.: "Fast Speaker Change Detection For Broadcast News Transcription And Indexing," <u>The Proceedings of Eurospeech 1999</u> ; Budapest, Hungary; 4 pages.
	Daniel M. Bikel et al.: "An Algorithm that Learns What's in a Name," <u>Machine Learning</u> , 1999; pages 1-20.
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	Francis Kubala et al.: "Smart Information Spaces: Managing Personal and Collaborative Histories," <u>Proceedings of the 1998 DARPA/NIST Smart Spaces Workshop</u> , July 30-31, 1998; 6 pages.
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	Hubert Jin et al.: "Automatic Speaker Clustering," <u>ICFEM</u> , Chantilly, Virginia; February 1997; 4 pages.
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	Andreas Stolcke et al.: "Automatic Linguistic Segmentation Of Conversational Speech," <u>Proceedings of the International Conference on Spoken Language Processing</u> , Vol. 2, Philadelphia 1996; pages 1005-1008.
	Scott S. Chen et al.: "Speaker, Environment and Channel Change Detection and Clustering via the Bayesian Information Criterion," in <u>DARPA Speech Recognition Workshop</u> , 1998, 6 pages.
	Marti A. Hearst: "Multi-Paragraph Segmentation of Expository Text," in <u>Proceedings of the 2<sup>nd</sup> Annual Meeting of the Association for Computational Linguistics</u> , New Mexico State University, Las Cruces, NM, 1994, pages 1-8.

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